



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT15D-5C BYPASS RATIO: 2.1  
 UNIQUE ID NUMBER: 1PW038 PRESSURE RATIO ( $\pi_{c0}$ ): 13.3  
 COMBUSTOR:  
 ENGINE TYPE: TF RATED THRUST ( $F_{00}$ ) (kN): 14.2

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	481.7	543.9	37.1	20.1
AS % OF ORIGINAL LIMIT				
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )				

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES  
 x DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.215	0.00	2.52	9.93	17.1
CLIMB OUT	85	2.2	0.180	0.67	4.18	9.79	15.1
APPROACH	30	4.0	0.068	16.00	49.24	5.23	
IDLE	7	26.0	0.028	96.67	124.60	1.08	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			92	4439	6288	454	-
NUMBER OF ENGINES				1	1	1	2
NUMBER OF TESTS				1	1	1	2
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				312.8	443.1	32.0	17.1
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							2.2
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							15.5-17.1

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.7
TEMPERATURE (K)	300
ABS HUMIDITY (kg/kg)	0.01

### FUEL

SPEC	Jet A-1
H/C	1.85
AROM (%)	

MANUFACTURER: Pratt & Whitney Canada  
 TEST ORGANIZATION: Pratt & Whitney Canada  
 TEST LOCATION: Longueuil, Quebec  
 TEST DATES: 13/07/1993-13/07/1993

### REMARKS

1. Not required to meet GASEOUS emissions regulations.

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)